

## WHAT IS CLAIMED IS:

1. A drum mixer for producing hot mix asphalt from virgin aggregate and recycled asphaltic material, comprising:

an elongated drum having a first end and a second end constructed in three separable sections lengthwise of the drum consisting of a first section extending from the first end of the drum, a second section extending from the second end of the drum and an intermediate section between the first and second sections;

a virgin aggregate entry in the first section of the drum near the first end of the drum;

flighting in the first section of the drum extending from the first end of the drum for moving the virgin aggregate through the first section of the drum into the intermediate section of the drum;

a burner extending into the second end of the drum for producing a flame in the second section of the drum and hot gases flowing counter to the flow of the virgin aggregate from the second section of the drum through the intermediate section and the first section of the drum; and

a recycled asphaltic material entry in the intermediate section of the drum.

2. A drum mixer as defined in claim 1 characterized further to include;

a cylindrical wall in the intermediate section of the drum over which the recycled asphaltic material moves upon entry into the drum.

3. A drum mixer as defined in claim 2 characterized further to include;  
    flighting around said cylindrical wall for moving the recycled asphaltic material  
        toward the second section of the drum.
4. A drum mixer as defined in claim 1 characterized further to include mating flanges  
    around the mating ends of the first section and the intermediate section, and around the  
    mating ends of the second section and the intermediate section.
5. A drum mixer as defined in claim 4 characterized further to include four alignment  
    apertures in each of said flanges spaced other than 90° apart, said apertures on adjacent  
    ends of said sections being in alignment when said sections are aligned circumferentially  
    in a specified manner, whereby said sections may be held in correct circumferential  
    alignment with drift pins during assembly.
6. A drum mixer as defined in claim 1 characterized further to include;  
    a tubular heat shield having a first end and a second end supported concentrically  
        in the second section of the drum in a position to surround the flame  
        produced by the burner; wherein;  
        the heat shield is supported in a position whereby the virgin  
        aggregate and recycled asphaltic material move around the heat  
        shield toward the second end of the drum.
7. A drum mixer as defined in claim 6, wherein;  
    the heat shield is supported in the second section of the drum whereby the second  
        end of the heat shield facing the intermediate section of the drum  
        terminates at the end of the second section of the drum nearer to the  
        intermediate section of the drum.

8. A drum mixer as defined in claim 7 wherein the heat shield is formed in the two sections supported in end-to-end relation.
9. A drum mixer as defined in claim 8 wherein the two sections of the heat shield are formed of different materials.